

REMARKS

I. Introduction

The Office Action mailed September 5, 2008, has been carefully considered. The present Amendment is intended to be a complete response thereto and to place the case in condition for allowance.

II. Status of the Claims

Claims 1-10 are pending. Claim 7 has been amended.

III. Summary of the Office Action

In the office action, the Examiner objected to claim 7 because “wherein” is recited twice. The Examiner also rejected claims 1-10 under 35 U.S.C. § 103(a) as being obvious over JP 07-16645 (henceforth “Japanese reference”) in view of Sunthankar (U.S. Patent No. 5,366,764).

IV. Argument

Applicant respectfully traverses the rejections as follows:

A. The claims are proper

Claim 7 stands objected to because it recites “wherein” twice. The claim has been amended to recite “wherein” only once. Therefore, Applicant respectfully submits that the claim is now proper, and requests withdrawal of the rejection.

B. The claims are not obvious

Claims 1-10 stand rejected as being obvious over the Japanese reference in view of Sunthankar. The Examiner alleges that “it would have been obvious … to employ Sunthankar’s teaching into the teaching of the Japanese reference for improving the coating uniformity as suggested by Sunthankar.” Applicant respectfully traverses the rejection.

First, the cited references fail to disclose or suggest all the elements of the claimed invention. In particular, the cited references fail to disclose extruded bars “with no limit on length” as recited in claim 1. The Japanese reference discloses a process for coating a billet body with a metal by extruding the billet 5 into a die 13 after traversing a container 14 containing a metal 9. After passing through the die, a metal coating 17b is obtained on the extruded bar 17. This coating is the result of pressure and friction exerted on the billet and the metal. The process of the Japanese reference, however, can only be used to coat an extrusion of limited length. The piston 16 pushing the billet must be retracted after it has been completely inserted into the container 14. That, in turn, limits the length of the extrusion that can be produced. On the contrary, the present invention has “no limit” on the length of the extruded bars.

Sunthankar discloses a process for coating a large number of irregularly shaped substrates with metals, semiconductor materials, composites, or alloys. This coating is accomplished by sublimating the coating material in an inert gas or vacuum. The vapors are then introduced into a chamber containing the substrates to be coated. To improve the uniformity of coating, the “substrate (16) may be turned or vibrated.” *See* column 10, lines 26-29. Because of the size limitation of the chamber of Sunthankar, this process cannot support an extruded bar “with no limit on length.”

Second, there is no rationale for one of ordinary skill in the art to combine the teachings

of the Japanese reference and of Sunthankar. The Japanese reference discloses a coextrusion process for coating a billet with a metal. Sunthankar discloses a sublimation coating process. Other than being coating processes, these two processes are completely different. The coextrusion process of the Japanese reference relies on friction and pressure to apply the metal coat on the billet. In the process of Sunthankar, the metal is sublimated, condensed onto the substrates, and solidified to form a coating. These two processes use different steps, different techniques, and different principles to form metal coatings. Thus, a step that is advantageous in one process may not be useful in the other process. The Examiner fails to clarify how the vibration of the substrate, as disclosed by Sunthankar, helps improve the “coating uniformity” in the process of the Japanese reference. In the process of Sunthankar, the vibration helps spread the droplets of metal condensed onto the substrate to uniformly distribute this liquid prior to solidification, resulting in an even and uniform coating. On the other hand, the process of the Japanese references does not involve evaporating and depositing metals on any substrate. As such, application of vibration to the process of the Japanese reference does not improve the coating uniformity, as there are no liquid droplets to be distributed by vibration. Therefore, one of ordinary skill in the art would recognize that the vibration disclosed by Sunthankar, for improving uniformity of the depositing material, would not be applicable to the coextrusion process of the Japanese reference. As such, one of ordinary skill in the art would not use vibration in the coextrusion process.

Therefore, for the reasons noted, Applicant respectfully submits that the present invention is not obvious over the cited references within the meaning of 35 U.S.C. § 103. Accordingly, Applicant respectfully requests withdrawal of the rejection.

V. Conclusion

Applicant has responded to the Office Action mailed September 5, 2008. All pending claims are now believed to be allowable and favorable action is respectfully requested.

In the event that there are any questions relating to this Amendment or to the application in general, it would be appreciated if the examiner would telephone the undersigned attorney concerning such questions so that the prosecution of this application may be expedited.

Please charge any shortage or credit any overpayment of fees to BLANK ROME LLP, Deposit Account No. 23-2185 (124544.0101). In the event that a petition for an extension of time is required to be submitted herewith and in the event that a separate petition does not accompany this response, Applicant hereby petitions under 37 C.F.R. 1.136(a) for an extension of time for as many months as are required to render this submission timely.

Any fees due are authorized above.

Respectfully submitted,

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